

1 May 1975
(DATE)

PRIORITY

MEMORANDUM FOR THE RECORD

SUBJECT: Opinion Request: Valeriy I. SAVCHENKO
Vyacheslav M. MASTIHIN
Vladimir M. TAPILIN
SOV Long termers - Chemical Catalysis - S&T Bilateral
Attached is self-explanatory material. May we have your opinion

, by 9 May 1975.

Please indicate to us the degree of interest and whether requirements
will be levied.

COMMENTS:

DISTRIBUTION: *✓*

AF *✓*
ARMY
NAVY *1+3*
DIA
COMMERCE
OSI
OER *defo OSI*
CI
CRS
OSS
SE
GSS
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Rec'd 16 May 75
Snow to Pardon 11 Apr 75
Kornoyev to Konyon 26 Mar 75

NAVY, USAF, DOS declassification & release instructions on file.

SAVCHENKO, Valeriy (SOV S&T Bilat)

When filled
in,

USAF POSITION ON COMMUNIST COUNTRY VISITORS

Project/Sponsor: Long Term, Chemical Catalysis, S&T Bilateral

Itinerary:

b. U. of Cal, 1 week.

Opinion # 33-1 Due 9 May 1975
 Passed to ICE. 9 MAY 75

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1 May 1975
(DATE)

PRIORITY

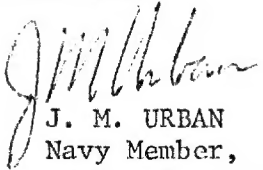
MEMORANDUM FOR THE RECORD

SUBJECT: Opinion Request: Valeriy I. SAVCHENKO
Vyacheslav M. MASTERN
Vladimir M. TAPILIN
SOV Long termers - Chemical Catalysis - SGT Bilateral
Attached is self-explanatory material. May we have your opinion
by 9 May 1975

1. (U) As requested in the above opinion request, the following comments are forwarded:

a. (C) Positive intelligence opinion: It is anticipated that Navy would levy some requirements and would have a moderate interest in this subject.

b. (C) Security opinion: The Navy Member has no objection to this visit provided there is no access; visual, documentary or verbal, to production, research or other activities funded by Navy contracts or grants, whether classified or unclassified.


J. M. URBAN
Navy Member,
Ad Hoc Intelligence Advisory
Group on Exchanges

Copy to:
OASD/ISA/IT
DIA (DIAAH)
NAVINTCOM-03DZ

Classified by: OPNAVINST S3800.14D
Exempt from GDS of EO 11652
Exemption Category 5B(2)
Declassified on: Impossible
to determine

CONFIDENTIAL

CONFIDENTIAL

SGT BILATERAL



Approved For Release 2001/09/03 : CIA-RDP79-00798A000300040004-7

American Chemical Society

PUBLIC, PROFESSIONAL, AND INTERNATIONAL
COMMUNICATION DIVISION

1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
Phone (202) 872-4600

Richard L. Kenyon, Director

April 11, 1975

STATINTL

Mr. Raymond Pardon
Office of Soviet Affairs
U.S. Department of State
Room 4229 21st & C Streets, N. W.
Washington, D. C. 20520

Dear Mr. Pardon:

Enclosed is a copy of the translation of Dr. Korneyev's letter to Dr. Kenyon dated March 26, 1975, and the data sheets for USSR research fellows, Drs. Mastihin, Savchenko and Tapilin, who propose to arrive in the U.S. at the beginning of July, 1975, for a period of six months.

You will note that the date of birth on Dr. Tapilin's data sheet is missing. We shall provide you with that information as soon as we obtain it from the Soviets. Also, there are problems with the proposed program of visits in each of the data sheets. These will be discussed by Dr. Kenyon with Professor Baldeschwieler early next week. In all probability, some of the proposed itineraries will be changed. (The itinerary of Dr. Savchenko is incomplete.) We shall inform you as soon as these itineraries are firmly established.

Sincerely yours,

Maria

Maria A. Snow
Asst. Program Administrator

Encl.

OPINION REQUEST

1 MAY 1975

RETURNED TO KENYON

26 MARCH 75

Approved For Release 2001/09/03 : CIA-RDP79-00798A000300040004-7

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MARCH 26, 1975

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Due 9 May 75

Suly { Vyacheslav M. MASTIHIN
card { Valeriy I. SAVCHENKO
all 3 { Vladimir M. TAPILIN

Sov long termers - Chemical
Catalysis - SOI Belokob.

March 26, 1975

Richard L. Kenyon
American Chemical Society
Communications Division
1155 16th Street, N. W.
Washington, D. C. 20036

Dear Mr. Kenyon:

The Academy of Sciences is contemplating sending the following scientists to the U.S. as trainees for the Program of Cooperation in the Field of Chemical Catalysis:

1. Dr. Vyacheslav Matveyevich Mastihin, Senior Scientist, Institute of Catalysis, Siberian Branch, Academy of Sciences, U.S.S.R. The subject of his scientific work is study of catalysts and catalytic reactions using radiospectrometry methods.
2. Dr. Valeriy Ivanovich Savchenko, Senior Scientist, Institute of Catalysis, Siberian Branch, Academy of Sciences, U.S.S.R. The subject of his scientific work is study of chemisorption and catalytic reactions on single crystal platinum using diffraction methods of slow electrons, Auger-spectroscopy and mass-spectrometry.
3. Dr. Vladimir Matveyevich Tapilin, Head, Laboratory of Quantum Chemistry, Institute of Catalysis, Siberian Branch, Academy of Sciences, U.S.S.R. The subject of his scientific work is the theory of chemical bonds on metal surfaces; dynamic theory of surface chemical reactions.

Drs. V. M. Mastihin, V. I. Savchenko and V. M. Tapilin would like to come to the U.S. at the beginning of July 1975, for a period of six months.

We would appreciate hearing from you about the acceptability of the time periods and the time of their arrival in the U.S.

Respectfully,

[s] S. G. Korneyev
Administration Chief

Attachments: Questionnaires of Drs.

Mastihin, Savchenko and Tapilin
A total of 6 pages

OPINION REQUEST

1 M 4-1 1975

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SNOW to PARSON

Soviet-American Program of Cooperation, 1972 - 1977

QUESTIONNAIRE

For Visiting USA in Accordance With the Agreement on
Scientific Exchange in the Field of Chemical Catalysis

Last Name, First Name, Patronymic: MASTIHN, Vyacheslav Matveyevich

Date and place of birth: January 5, 1937, Village of Banishchi,
L'govskiy Rayon, Kurskaya Oblast'

Education (date and school graduated from) and degree received:

Graduated from Kharkov State University, 1959
Candidate of Chemical Sciences

Place of work and position:

Institute of Catalysis, Siberian Branch, Academy of
Sciences, U.S.S.R., Senior Scientist

Area of specialization: Study of catalysts and catalytic processes by methods
of magnetic radiospectroscopy

Knowledge of Foreign

Languages:

English (able to express himself)
German (reads and translates with the use of a dictionary)

Publications (titles of major works and year of publication):

1. Study of Vanadium Catalysts for Oxidation of Sulphur Dioxide by Means of Electron Spin Resonance Method, DAN, USSR, 117,676 (1967).
2. The ESR Spectra of Vanadium Catalysts for Oxidation of Sulphur Dioxide, Kinetics and Catalysis, 11,6 (1970).
3. Chemical Polarization of Nuclei in Oxidation of Dimethyl-sulphide with Nitric Acid, DAN, USSR, 204,147 (1972).
4. Proton Chemical Polarization, Autocatalysis and Frontal Kinetics of the Oxidation of Diethyl-sulphides with Nitric Acid, Organic Magnetic Resonance, 5,343 (1973).
5. Investigation of Chemical Exchange Kinetics in - allyl - palladiumchloride - Dienes, Olefins; Reaction Kinetics and Catalysis Letters, 1,327 (1974).

Proposed field of research work and cooperation:

Study of catalysts and catalytic reactions by methods
of radiospectroscopy.

Questionnaire - MASTIHIN

Page 2

9. Proposed program of visits:

Scientific work in the field indicated -
Professor Robert Waughan, California Institute
of Technology [Dept. of Chemical Engineering].
~~- 5 months, 1 week; less than one or two days~~

Visit laboratory of Professor Muetterties, Cornell
University, to discuss the problem of the investigation
of transition metal complexes.
- 1 week;

Visit laboratory of J. Waugh, Massachusetts Institute
of Technology, to discuss the application of radio-
spectroscopic methods in catalysis.
- 1 week;

Visit laboratory of Professor J. Turkevich, *Princeton*
familiarization with the application of radio-
spectroscopic methods.
~~- 1 week.~~ *5 months and 1 wk*

10. Titles of possible
lectures:

The study of certain oxide catalysts by means of
electron paramagnetic resonance.

11. Proposed date of arrival and length
of stay:

July 1975, six months

Translated by M. Snow

CHEMICAL CATALYSIS

Soviet-American Program of Cooperation, 1972 - 1977

QUESTIONNAIRE

For Visiting USA in Accordance With the Agreement on
Scientific Exchange in the Field of Chemical Catalysis

- . Last name, first name, patronymic: SAVCHENKO, Valeriy Ivanovich
- . Year and place of birth: June 6, 1939, Leningrad
- . Education (date and school graduated from) and degree received:
Graduated from Lensovet Leningrad Technological
Institute - 1962, Candidate of Chemical Sciences.
- . Place of work and position: Senior Scientist, Institute of Catalysis,
Siberian Branch, USSR Academy of Sciences.
- . Area of specialization: Study of chemisorption and catalysis on metals.
- . Knowledge of foreign languages:
English (able to express himself)
German (reads and translates with the use of a dictionary)
- . Publications (titles of major works and year of publication):
 1. Hydrogen Adsorption on Nickel. Kinetics and Catalysis, 9,1, 1968.
 2. The effect of nascent hydrogen adsorption on catalytic activity of copper and gold in the reaction of deuterio-hydrogen exchange, DAN, 189, 3, 1969.
 3. Study of hydrogen interaction with oxygen on the surface of platinum by means of field emission microscopy. Lecture during the V International Congress on Catalysis, USA, 1972.
 4. Chemical displacement in Auger-spectrum of iron during oxygen adsorption, DAN, USSR, 208,5,1154, 1973.
 5. Chemical displacement in Auger-spectra of wolfram and molybdenum during oxygen adsorption, Izvestiya, Academy of Sciences, USSR, Physical Series, 38,2,273, 1974.

tionnaire -- SAVCHENKO

2

Proposed field of research work and cooperation:

Study of chemisorption and catalytic reactions on single-crystal platinum using diffraction methods of slow electrons, Auger-spectroscopy and mass-spectrometry.

Proposed program of visits (indicate scientific institutions and names of scientists with whom it would be desirable to meet, and the dates of each visit):

Discussion with Professor G. Somorjai the possibility of the application of the molecular beam method in the investigation of chemisorption and catalysis on metals.
University of California, Los Angeles, California.
Period of visit - 1 week.

Cal Tech - Prof Weinberg 2 months 3 wks
General Motors - 3 months - Dr. Larson -
Research Physical Chemistry Dept.
Lab. - Technical
Center, Warren Michigan

Titles of possible lectures:

Kinetics of gas chemisorption on metals.

Proposed date of arrival and duration of visit:

July 1975, duration of visit - 6 months.

lated by M. Snow

QUESTIONNAIRE

For Visiting USA in Accordance With the Soviet-American Cooperation in the Field of Chemical Catalysis

1. Last Name, first name, patronymic: TAPILIN, Vladimir Matveyevich
Year and place of birth: Khutor Chern', Znamenskiy Rayon, Kurskaya Oblast'
DOB 15 July 1935
2. Brief scientific biography (year graduated from the university, year awarded scientific degree, location & present position):

1959 - graduated from the Moscow State University, Department of Physics;
1972 - Awarded scientific degree as Candidate of Physical Mathematical Sciences;

1972 to present - Head, Laboratory of Quantum Chemistry, Institute of Catalysis, Siberian Branch, USSR Academy of Sciences.
4. Date of arrival and duration of scientific mission: [July] 1975, 6 months
5. Knowledge of foreign languages: English, Czech - able to express himself
6. Topic of scientific work in US: The theory of chemical bonds on metal surfaces; dynamic theory of surface chemical reactions.
7. List of scientific works (indicate year of publication, place of publication and co-authors):
 1. The effect of screening on the properties of particles adsorbed or dissolved in metal. I. Equations describing local conditions in metals. Kinetics and Catalysis, 12, 1093, 1971.
 2. II. Local conditions formed in metal by proton. Kinetics and Catalysis, 12, 1426, 1971.
 3. III. Bond energy in diatomic molecules. Kinetics and Catalysis, 13, No. 1, 1972.
 4. On the theory of fine local conditions of impure metal. Report Theses, 2nd All-Union Conference on the Theory of Solids. Moscow, 1969.
 5. Chemical displacement of tungsten and molybdenum in Auger-spectra during oxygen adsorption. Izvestiya, USSR Academy of Sciences, Physical Series, 38, 279, 1974. Co-authors - K. A. Dadayan, Yu. G. Kriger, V. I. Savchenko.

Questionnaire - TAPILIN

Page 2

6. On computation of electronic conditions of particles chemisorbed on the surface of a solid. DAN, USSR, 1974. Being printed.

1. Titles of proposed lectures: [none indicated]

1. Program of scientific work (scientific institutions desirable to visit, duration of visit in each institution, scientists to be visited and range of questions to be discussed):

California Institute of Technology, Professor W. H. Weinberg. Work on the theory of adsorption in transition metals. - 5 months.

University of California, Professor G. A. Somorjai. Theory of dynamic chemical reactions on metal surfaces based on experimental data from molecular beams. *one week*

Translated by M. Snow